

2.4 Solving Multi-Step Equations

Solve each equation.

$$\begin{array}{r} \text{A. } 4g - 2 = -6 \\ \quad +2 \quad +2 \\ \hline 4g = -4 \\ \quad 4 \quad 4 \\ \hline \boxed{g = -1} \end{array}$$

$$\begin{array}{r} \text{B. } 18 = 5p + 3 \\ \quad -3 \quad -3 \\ \hline 15 = 5p \\ \quad 5 \quad 5 \\ \hline \boxed{3 = p} \end{array}$$

$$\begin{array}{r} \text{C. } 9 = x + m \\ \quad -1 \quad -1 \quad 7 \\ \hline 7(8) = \left(\frac{m}{7}\right)x \\ \hline \boxed{56 = m} \end{array}$$

$$\begin{array}{r} \text{D. } \frac{3}{2}a - 8 = 11 \\ \quad +8 \quad +8 \\ \hline \frac{2}{3} \cdot \frac{3}{2}a = 19 \cdot \frac{2}{3} \\ \hline \boxed{a = 12\frac{2}{3}} \end{array}$$

$$\begin{array}{r} \text{E. } (20) = \left(\frac{n-3}{8}\right)8 \\ \quad 160 = n - 3 \\ \quad +3 \quad +3 \\ \hline \boxed{163 = n} \end{array}$$

$$\begin{array}{r} \text{F. } \left(\frac{b+4}{-2}\right) = (-17)(-2) \\ \quad b+4 = 34 \\ \quad -4 \quad -4 \\ \hline \boxed{b = 30} \end{array}$$

G. Twelve decreased by twice a number equals -34.

$$\begin{array}{r} 12 - 2x = -34 \\ -12 \quad -12 \\ \hline \end{array}$$

$$\begin{array}{r} -2x = -46 \\ \quad -2 \quad -2 \\ \hline \boxed{x = 23} \end{array}$$